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Steroids: Just the Facts

What are steroids?

Anabolic androgenic steroids are synthetic derivatives of the male hormone testosterone that are taken to build muscle, enhance performance, and improve appearance. The drug's anabolic or "muscle-building" effects help the body retain protein, a necessary building block for the growth of muscles, bones, and skin. The androgenic or "masculinizing" effects cause the development of a deep voice, facial and body hair, muscle mass, and aggressiveness. Unfortunately, steroid abusers risk a variety of unwanted side effects, some of which are irreversible. Another significant danger includes HIV infection if needles are shared.

Some common trade names of anabolic androgenic steroids include Anatrofin, Anaxvar, Annadrol, Bolasterone, Decadiabolin, Decadurabolin, Dehydropiandrosterone (DHEA), Delatesteryl, Dianabol, Dihydroalone, Durabolin, Dymethazine, Enoltestovis, Equipose, Gamma Hydroxybutylate, Maxibolin, Methatriol, Methyltestosterone, Parabolin, Primobolin, Quinolone, Therabolin, Trophobolene, and Winstrol. Slang terms include Gym Candy, Pumpers, Stackers, A's, Anabolics, Arnolds, Bolins, GHB, Oxys, Anabols, Balls or Bulls, Delatesteryl, Maxibolin, Weight Trainers, Arnies, Dep-testosterone, Methyltestosterone, Rhoids, and Juice.

Who typically uses steroids?

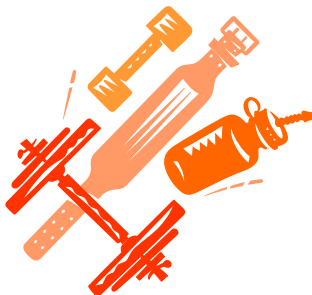
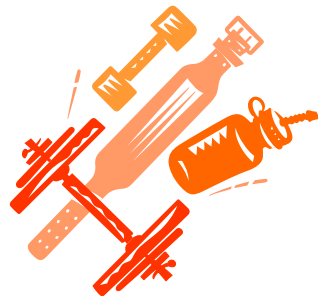
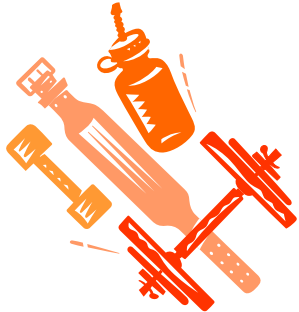
The majority of steroid users tend to be young, male athletes, although steroid use is not limited to bodybuilders and football players alone. Increasing evidence shows that athletes in endurance sports such as swimming, running, and cycling use steroids. Adolescents may use them to quicken the onset of puberty and maturation, plus male and female models may take them to improve their body image. Those in certain, physically demanding occupations, like law enforcement, bouncers, or military personnel may use steroids to build strength.

How are steroids used?

Steroids are either taken orally in tablet form or injected intramuscularly. Users rely on hearsay and gossip to determine dosage levels that may not be safe. Individuals abusing steroids take megadoses of hundreds of milligrams per day, whereas doctors prescribe only 1 to 5 mg. per day for legitimate medical uses. Under the false assumption that taking more steroids will yield better results, users typically take many types of steroids in combination with other drugs, a phenomenon known as "stacking." Users often take steroids in "cycles" where they use steroids for six to 12 weeks at

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a time punctuated by periods where they do not take steroids. Steroid users do this to avoid building up a tolerance.

Are steroids used with other drugs?

Steroid users may combine steroids with stimulants, depressants, pain killers, anti-inflammatory drugs, and other hormones to offset steroid side effects. Paradoxically, this strategy further increases the chances of adverse reactions.

Where do users get steroids?

The majority of these steroids are illegally manufactured or traded on the black market which eliminates any quality controls. Steroids may be contaminated, mislabeled, or bogus.

Are there valid medical uses for steroids?

Anabolic androgenic steroids are used medically for some forms of anemia, some breast cancers, osteoporosis, endometriosis, and hereditary angiodema, a swelling disorder. However, there is no sanctioned use of steroids for cosmetic purposes or athletic performance. Because of negative side effects and the potential for abuse, anabolic androgenic steroids have been classified as controlled substances with severe penalties for trafficking, possession, or use. Most athletic associations, including the International Olympic Committee, test athletes for steroids, and penalize those in whom steroids are detected.

Can steroids improve athletic performance?

Although users report increases in muscle bulk, strength, and endurance, steroids can not improve agility, athletic skill, and cardiovascular capacity — factors which also affect performance. In addition, there is no conclusive evidence that steroid use decreases recovery time from injuries. In fact, some research asserts that steroid abuse hampers the normal process of wound healing.

How can I tell if someone close to me is abusing steroids?

Be aware of the following symptoms of steroid abuse:

- Rapid weight gain and muscle development
- Acne flare up
- Fluid retention
- Jaundice (yellow tinge to eyes and skin)
- Mood swings and depressed moods
- Aggressive behavior
- Premature balding

What are the psychological effects of steroid use?

Steroid abuse can have profound effects on the mind, causing temporary personality changes in some. Users may exhibit uncontrolled aggression

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and violent behavior called “roid rage,” in addition to severe mood swings, manic episodes, and depression. Moreover, users may suffer paranoid jealousy, extreme irritability, delusions, and impaired judgment from feelings of invincibility. During periods when they do not use, chronic users may experience withdrawal symptoms that intensify the psychological effects.

What are some of the side effects of steroid use?

A build-up of steroids upsets the body’s internal balance, and side effects occur when the body begins to compensate to eliminate the excess steroids or hormones. Steroid abuse can cause stunted growth in adolescents, continuous headaches, bone pain, nausea, and changes in bowel and urinary patterns. An unexpected side effect is that steroid use can weaken the tendons, placing athletes at risk of serious injury.

- **Cardiovascular System:** Enlargement of the heart, a precursor to heart failure; high blood pressure; atherosclerosis or hardening of the arteries, a precursor to coronary heart disease; elevated cholesterol levels; heart palpitations; heart attack; stroke; anaphylactic and septic shock.
- **Reproductive System:** In males, excess testosterone is converted to the female hormone estrogen which causes the development of female characteristics. For instance, men experience prostate enlargement, sterility, sexual dysfunction, baldness, breast enlargement, and testicular atrophy. Excess testosterone in females has the opposite effect, causing menstrual irregularities, deepening of the voice, baldness, fetal damage, hair growth on other parts of the body, sexual dysfunction, sterility, reduction of breasts, and genital swelling.
- **Vital Organs:** Prolonged heavy use of steroids can permanently damage the liver, causing cancer, jaundice, bleeding, and hepatitis. Steroids can impair the kidneys leading to kidney stones and kidney disease.

Can steroids cause death?

Yes. Steroid-related fatalities occur as a result of suicide, homicide, liver disease, heart attack, and cancer.

Are there other problems associated with steroid use?

Problem users may lose interest in daily activities and report loss of energy and boredom. They may have a hard time limiting their use, may build a tolerance to steroids requiring larger amounts to get the muscle-building effects, and may develop problems with their jobs and personal relationships. Steroid use can also cause a phenomenon called “male anorexia” where users experience dissatisfaction with their body image and do not notice changes that are apparent to others.

How long do steroids stay in the user’s body?

Oral steroids can be detected up to several weeks after use, while injected steroids can be detected for several months after use.



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Are adolescents at-risk?

Teenage and young adult males who participate in athletics are at particular risk for abusing steroids because they believe that steroids can help them enhance their physical performance and their appearance. Ironically, teens are at particular risk of harming their health and permanently changing their appearance in ways they do not expect — acne, stunted growth, female characteristics (in boys), and male characteristics (in girls). Research also shows that the earlier people start using drugs, the more likely they are to go on to experiment with other dangerous drugs. Athletes who use steroids risk discovery and exclusion from sports activities.

How are people usually introduced to steroids?

Many young people are introduced to steroids by their peers—usually acquaintances, friends, and gym partners. People often try steroids because they feel peer pressure, are overly concerned with their body image, they believe their competition uses steroids, and they don't believe that steroids are dangerous to use.

What can parents do?

The good news is that youth can be taught to resist social pressures to try drugs, like steroids. Fortunately, public education programs and prevention programs that build resiliency factors and self-esteem in youth can prevent steroid use and experimentation. Parents can help by becoming informed about steroids and by talking to their children about steroid use.

Who should I contact if someone close to me has a problem with steroids?

Contact the Texas Commission on Alcohol and Drug Abuse's toll-free hotline at (800) 832-9623 or your local Council on Alcohol and Drug Abuse for referral assistance. You may also contact your family physician, hospital, or yellow pages for other intervention and treatment options.

For more information, contact the following sources:

- Your region's TCADA Prevention Resource Center. Dial toll-free (888) PRC-TEXX to be connected to the center nearest you.
- Your local Council on Drug and Alcohol Abuse.
- Your local public library.
- Other sources can be found in the yellow and blue pages of your phone book under "Drug Abuse."

Access reliable information instantly from the Internet from the following sites:

- The National Clearinghouse for Alcohol and Drug Information's home

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page has information on steroids and other substances of abuse.
<<http://www.health.org>>

- The National Institute on Drug Abuse has national statistics and the latest research findings available. <<http://www.nida.nih.gov>>
- The Partnership for a Drug-Free America has a drug database to help parents identify specific drugs, their effects, and drug paraphernalia. <<http://www.drugfreeamerica.org>>



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